

Water Sharing Plan for the Karuah River Water Source 2003

[2003-181]



New South Wales

Status Information

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Provisions in force

The provisions displayed in this version of the legislation have all commenced.

Notes—

- **See also**
[Statute Law \(Miscellaneous Provisions\) Bill 2006](#)
- **Note**
In incorporating the amendments made by the *Water Management (Minister's Plans) Order No 2 of 2004*, published in Gazette No 110 of 1.7.2004, p 5072, changes have been made to the numbering of some of the provisions to maintain appropriate numerical or alphabetical order.

Authorisation

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Water Sharing Plan for the Karuah River Water Source 2003



New South Wales

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Water Sharing Plan for the Karuah River Water Source 2003



New South Wales

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Karuah River Water Source 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* as amended (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2004 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Lower North Coast Water Management Area known as the Karuah River Water Source (hereafter **this water source**) as shown in Schedule 2.

Note—

The Lower North Coast Water Management Area is shown on a map in Appendix 1.

Note—

Maps referred to in this Plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2.

- (2) This water source is divided into the following management zones shown on the map in Schedule 2:
 - (a) the Telegerry River and all of its tributaries (hereafter **management zone 1**),

- (b) the Karuah River and all its tributaries that enter the Karuah River upstream of Stroud weir, excluding Mammy Johnsons River (hereafter **management zone 2**),
- (c) the Karuah River and all its tributaries that enter the Karuah River downstream of Stroud Weir, but upstream of the Booral flow monitoring site (hereafter **management zone 3**),

Note—

At the commencement of this Plan, the flow monitoring site referred to in subclause 2 (c) is the Booral flow gauging station.

- (d) the Mammy Johnsons River and all its tributaries (hereafter **management zone 4**), and
- (e) the Karuah River and all its tributaries that enter the Karuah River downstream of the Booral flow monitoring site (hereafter **management zone 5**).

Note—

At the commencement of this Plan, the flow monitoring site referred to in subclause 2 (e) is the Booral flow gauging station.

Note—

Specific conditions apply to dealings of individual daily extraction limits within these management zones.

5 Waters to which this Plan applies

- (1) The waters of this water source include all water occurring on the land surface shown on the map in Schedule 2 including, but not limited to:
 - (a) all rivers in this water source including, but not limited to, those nominated in Schedule 3, and
 - (b) all lakes and wetlands in this water source.
- (2) The waters of this water source exclude all water contained within aquifers underlying this water source.
- (3) The waters of this water source exclude all water determined by the Minister to be saline estuarine waters.

6 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.
- (2) Additional terms to those identified in subclause (1) are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.

- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the [Water Act 1912](#)

- (1) This Plan applies from commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note—

To the extent possible, the rules embodied in this Plan will apply to matters administered under the [Water Act 1912](#) in the interim.

8 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act, this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government Gazette on 20 December 2002 (hereafter **the SWMOP**).
- (2) Schedule 4 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

10 Vision

- (1) The vision for this Plan is to achieve a progressive, discernible and sustainable improvement in the quality of the Karuah River and its tributaries to deliver greater benefits in health, biodiversity, recreational attractiveness and economic productivity, achieved through implementation of a balanced water management plan.
- (2) This Plan also recognises the following respect statement for Aboriginal values in this water source:
 - (a) life-giving water is of extreme significance to Aboriginal culture for its domestic, traditional and spiritual values, and
 - (b) whilst water supplied for the environment will provide protection for native flora and fauna, water for fishing, food gathering and recreational activities, it is important that the community respects the spiritual significance of water to the Aboriginal people.

11 Objectives

The objectives of this Plan are to:

- (a) protect natural water level in pools during periods of low flows,
- (b) protect natural low flows,
- (c) protect or restore a proportion of moderate flows and high flows,
- (d) maintain or restore the natural inundation patterns and distribution of floodwaters supporting natural wetland and floodplain ecosystems,
- (e) maintain or imitate natural flow variability,
- (f) minimise the impacts of in-river structures,
- (g) maintain estuarine processes and habitats,
- (h) maintain water supply priorities for basic landholder rights,
- (i) supply town water to meet the existing and potential population needs of urban communities, conditional on water availability,
- (j) provide an agreed level of water sharing to maintain irrigation industry viability,
- (k) protect and enhance recreational and tourism opportunities,
- (l) recognise and protect traditional values of water to Aboriginal people,
- (m) protect and enhance recreational and commercial fishing interests,
- (n) protect and enhance the oyster industry in the lower Karuah River, and
- (o) improve water quality parameters as a result of environmental flows at low flow periods.

Note—

This objective refers to maintaining water quality. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in this Plan make a positive contribution to maintaining water quality.

12 Strategies

The strategies of this Plan are to:

- (a) establish cease (and commence) to pump levels and flow classes,
- (b) prevent the extraction of water from water pools if there is no visible flow in the vicinity of the pool,
- (c) limit the amount of water that can be extracted on a daily basis from different flow

classes,

- (d) limit the long-term average extraction of water,
- (e) protect flows to enhance the operation of fishways (should they be constructed),
- (f) limit the number of new water entitlement applications that may be approved,
- (g) secure water access for towns up to the limit of their demand during low flow periods,
- (h) mitigate the impact on important industries that would be unable to adjust quickly to change by providing access to essential water during very dry periods,
- (i) ensure that water use will be accurately monitored,
- (j) clearly define access conditions for water extraction and rules for extracting water,
- (k) establish rules for determining the water available from time to time under access licences,
- (l) establish water allocation rules, and
- (m) specify access licence dealing rules that maximise flexibility for water users without adversely impacting on this water source.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flows,
- (b) change in moderate to high flows,
- (c) change in local water utilities access,
- (d) change in ecological condition of this water source and its dependent ecosystems,
- (e) extent to which basic landholder rights have been met,
- (f) change in economic benefits derived from water extraction and use,
- (g) extent to which native title rights requirements have been met,
- (h) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (i) (Repealed)

Note—

Appendix 3 details the objectives to which these performance indicators relate and the methods proposed for assessing these indicators.

Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (c) and 21 (e) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore river flow variability in this water source.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of water in this water source within the limits of water availability on a long-term average basis, and
 - (b) sharing of the flows that occur in this water source on a daily basis.

16 Extraction Management Unit

- (1) The availability of water for extraction from this water source on a long-term average basis will be determined at the level of an extraction management unit.
- (2) The extraction management unit of which this water source is part is known as the Karuah River Extraction Management Unit (hereafter **this Unit**) and is shown on the map in Schedule 5.

17 Flow classes

- (1) This Plan establishes the following flow classes as the basis for sharing of daily flows:
 - (a) very low flow class at or less than 5 megalitres per day (hereafter **ML/day**) on a rising river and at or less than 3.5 ML/day on a falling river,

Note—

The 3.5 ML/day in subclause (a) corresponds to the estimated 88th percentile for all days of record in December, the critical month, and is referred to as the cease to pump on a falling river. The 5 ML/day corresponds to the 86th percentile for all days of record in December, and is referred to as the commence to pump on a rising river.

- (b) A class flows greater than 5 ML/day and at or less than 18 ML/day on a rising river, and greater than 3.5 ML/day and at or less than 18 ML/day on a falling river,
- (c) B class flows greater than 18 ML/day and at or less than 87 ML/day, and
- (d) C class flows greater than 87 ML/day.

Note—

The flow classes have been determined based on flow information that inherently includes seasonal effects as well as evaporation and seepage losses.

- (2) Notwithstanding subclause (1), when planned environmental water provisions are activated, the very low flow class thresholds and the bottom of A class will increase to such an extent to satisfy the planned environmental water in accordance with clause 23.

18 Flow reference point

For the purpose of this Plan, all flows referred to relate to the recorded flows at the flow reference point, as shown on the map in Schedule 2.

Note—

As part of the implementation of this Plan the Minister may use, and, where necessary, establish monitoring sites at such points as are necessary to efficiently implement this Plan, and shall establish flow reference levels at these sites which are equivalent to the reference flows at the flow reference point.

19 Determination of flow class

Announcement of daily flow classes will be made from time to time by the Minister based on the flow at a flow gauging station, correlated to the flow reference point established in clause 18.

Part 4 Environmental water provisions

20 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

21 Planned environmental water

(1) Environmental health water is identified and established as follows:

- (a) In very low flows, the flow occurring in this water source minus 2 ML/day, minus the very low flow access permitted under clause 62A of this Plan.

Note—

The 2 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights.

- (b) (Repealed)

- (c) In A class flows, the flow occurring in this water source on a rising river for 24 hours after the lower flow specified in clause 17 (1) (b) is exceeded minus 2 ML/day and thereafter the flow occurring in this water source minus 13 ML/day.

Note—

The 2 ML/day is for basic landholder rights and the 13 ML/day is for basic landholder rights plus the A class TDEL of 11 ML/day.

- (d) In B class flows, the flow occurring in this water source on a rising river for 24 hours after the lower flow specified in clause 17 (1) (c) is exceeded minus 13 ML/day and there after the flow occurring in this water source minus 28 ML/day.

Note—

The 13 ML/day is for basic landholder rights plus the A class access and the 28 ML/day is basic landholder rights plus the B class TDEL of 26 ML/day.

- (e) In C class flows, the flow occurring in this water source on a rising river for 24 hours after the lower flow specified in clause 17 (1) (d) is exceeded minus 28 ML/day and there after the flow occurring in this water source minus 33 ML/day.

Note—

The 28 ML/day is for basic landholder rights plus B class access and the 33 ML/day is for basic landholder rights plus the C class TDEL of 31 ML/day.

Note—

The total daily extraction limit for access licences in each flow class is established at clause 45.

Note—

The 24 hour provision ensures the first flush of a rising river is allowed to pass before increased water extraction can commence.

(2) Environmental health water is maintained as follows:

(a) In very low flows:

- (i) holders of access licences identified in Schedule 6 have restricted access in accordance with Clause 62A of this Plan,
- (ii) holders of all other access licences are not permitted access to water, and
- (iii) persons exercising domestic and stock and native title rights may take a combined total of up to 2 ML/day.

Note—

The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment for reasons of public health, or to preserve basic landholder rights.

(b) In A class flows:

- (i) during years 1 to 5 of this Plan, holders of access licences determined by the process identified in clause 49 have restricted access to water in the first 24 hours after the A class lower flow level is exceeded on a rising river,
- (ii) during years 6 to 10 of this Plan, holders of access licences determined by the

process identified in clause 49 are not permitted access to water in the first 24 hours after the A class lower flow level is exceeded on a rising river,

- (iii) the holders of all other access licences have no access to water in the first 24 hours after the A class lower flow level is exceeded on a rising river,
- (iv) thereafter, the holders of access licences have restricted access to this flow class as specified in clause 46,
- (v) persons exercising domestic and stock and native title rights may take water, and
- (vi) if the water taken under domestic and stock and native title rights is assessed to be exceeding 2 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 50 to maintain the environmental water in this flow class.

(c) In B class flows:

- (i) the holders of access licences cannot access this flow class for the first 24 hours after the B class lower flow level is exceeded on a rising river,
- (ii) thereafter, the holders of access licences have restricted access to this flow class as specified in clause 46,
- (iii) persons exercising domestic and stock and native title rights may take water, and
- (iv) if the water taken under domestic and stock and native title rights is assessed to be exceeding 2 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 51 to maintain the environmental water in this flow class.

(d) In C class flows:

- (i) the holders of access licences cannot access this flow class for the first 24 hours after the C class lower flow level is exceeded on a rising river,
- (ii) thereafter, the holders of access licences have restricted access to this flow class as specified in clause 46,
- (iii) persons exercising basic landholder rights may take water, and
- (iv) if the water taken under domestic and stock and native title water rights is assessed to be exceeding 2 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 51 if this is necessary to maintain the environmental water in this flow class.

- (e) In all flow classes, limits are imposed on the availability of water in accordance with clauses 35 and 37, that protect a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction.

Note—

These rules protect the water for the environment by limiting the rate of extraction of water in different flow ranges, thereby achieving the objectives of this Plan.

Note—

This Plan recognises that the planned environmental water provisions provide non-extractive benefits, including traditional Aboriginal spiritual, social, customary and cultural benefits, and improved water quality.

22 Extraction by water supply works

Notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only if there is visible flow in the river in the vicinity of the work.

23 Planned environmental water

- (1) At the commencement of this Plan, there is no water committed for specified environmental purposes in accordance with section 8 (1) (b) of the Act.
- (2) Pursuant to section 45 (1) (b) of the Act, once the Stroud Weir fish passage is constructed and operational, supplementary environmental water is identified and established as follows:
 - (a) each year during the periods 1 June to 31 July and 1 October to 30 November, the very low flow and A class flow levels established in clause 17 (1) (a) and (b) should be increased to provide and maintain a 10 ML/day flow at Stroud Weir,
 - (b) these levels are to be maintained until no more than a 3 week, continuous period of flows greater than 10 ML/day occurs at the Weir for each period, or to the end of either period, at which time the very low flow and A class flow levels specified in clause 17 (1) (a) and (b) will reapply, and
 - (c) the Minister, in consultation with the Minister for Fisheries, may determine a lesser period than three weeks as established in subclause (b), if warranted.

Note—

As part of the implementation of this Plan, an expert panel is reviewing the need for a fish passage device on the Weir and the maximum period required for it to operate effectively. This clause establishes the upper limit for the maximum period of restricted flow class access resulting from the operation of the fish passage.

- (3) Supplementary environmental water is maintained as follows:
 - (a) in the very low flow class, during years 1 to 5 of this Plan, the holders of access licences determined by the process specified in clause 49 have restricted access

to water,

- (b) in the very low flow class, during years 6 to 10 of this Plan, the holders of access licences determined by the process specified in clause 49 are not permitted access to water,
- (c) in the very low flow class, all other access licences are not permitted to take water, and
- (d) pursuant to clause 51, persons exercising domestic and stock and native title rights may take a combined total for the water source of up to 2 ML/day.

24 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their access licence as adaptive environmental water.
- (2) The Minister may grant an access licence in a water source to which this Plan applies if the licence is subject to an adaptive environmental water condition and arises through water savings in the system made in that water source as referred to in section 8C (1) of the Act.
- (2A) The Minister may change the category or subcategory of an access licence in a water source to which this Plan applies if the licence is subject to an adaptive environmental water condition that arises through water savings as referred to in section 8D of the Act.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

Part 5 Basic landholder rights

25 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

Note—

The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment, for reasons of public health, or preserve basic landholder rights.

26 Domestic and stock rights

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights are estimated to be a total of 2 ML/day.
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note—

Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in this water source and/or as a result of an increase of the exercise of basic landholder rights by existing landholders.

27 Native title rights

- (1) At the commencement of this Plan there are no holders of native title rights and therefore the requirements for native title rights are estimated to be a total of 0 ML/day.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note—

Increase in use of native title rights may occur as a result of the granting of native title rights under the Commonwealth's [Native Title Act 1993](#).

28 Harvestable rights

The requirement for water under harvestable rights is the amount of water owners of land are entitled to capture pursuant to the harvestable rights Order published in the NSW Government Gazette on 23 March 2001 under section 54 of the Act.

Part 6 Bulk access regime

29 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (d) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climatic variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,

- (d) establishes rules according to which available water determinations are to be made as provided for in Part 9 Division 2 of this Plan,
- (e) establishes rules according to which access licences are managed as provided for in Part 10 of this Plan, and
- (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Parts 9 and 10 of this Plan.

Part 7 Requirements for water under access licences

30 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note—

The amount of water specified in this Part represents the total volumes specified on access licences in this water source. It is not a commitment to supply that water.

31 Estimate of water requirements

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, the requirements identified for water for extraction under licence within this water source will total approximately 3,360 megalitres per year (hereafter **ML/yr**).
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, there will be several runoff harvesting access licences in this water source, that will have their access licence share component expressed as the water that can be extracted from time to time from the approved works.
- (3) This Plan recognises that the total requirements for water for extraction within this water source may change during the term of this Plan as a result of:
 - (a) the granting, surrender, cancellation or non-renewal of access licences, or
 - (b) variations to local water utility licences arising from sections 66 (3) or 66 (4) of the Act.

Part 8 Rules for granting access licences

32 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in this water source and the need to protect the ecological health of the river.

(2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.

(3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than access licences of the following kinds:

(a) local water utility access licences,

Note—

Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.

(b) specific purpose access licences for which applications are provided for under the regulations in accordance with section 61 (1) (a) of the Act, or

(c) Unregulated river (Aboriginal cultural) access licences up to 10 ML/yr per application, or

(d) unregulated river (research) access licences provided the total share components assigned to all licences in this category does not exceed 10 ML/yr.

(4) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share and extraction component sought will be the minimum required to meet that purpose and circumstance.

(5) Subclause (4) does not apply to an application for a new access licence arising from:

(a) section 61 (1) (c), of the Act, where the right has been acquired by auction, tender or other open market process, or

(b) an access licence dealing.

(6) Any individual daily extraction limit (hereafter **IDEL**) granted in accordance with this clause cannot exceed the IDEL initially assigned to an equivalent share component for that category of access licence, as specified by clause 48.

(7) Runoff harvesting access licences may have the share component expressed either as a volume in ML/yr or in terms of the amount of water that can be extracted from time to time from specified works.

(8) (Repealed)

Part 9 Limits to the availability of water

Division 1 Long-term average extraction limit

33 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

34 Extraction Management Unit

Management of the long-term average extraction of water from this water source will be undertaken in the context of this Unit, referred to in clause 16 (2).

35 Long-term average extraction limit

- (1) The long-term average extraction limit for this water source will be the total of:
 - (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the [Water Act 1912](#) in this water source, immediately prior to the commencement of Part 2 of Chapter 3 of the Act for this water source, and
 - (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in this Unit at the commencement of this Plan.

36 Variation of the long-term average extraction limit

The long-term average extraction limit of this water source may be varied by the Minister if, dealings under Part 11 result in the issuing or surrender of access licences in this Unit.

Division 2 Available water determinations

37 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
 - (a) water extraction in this Unit will be monitored in each water accounting year to determine if there is any growth in volumes extracted above the long-term average extraction limit specified in clause 35, based on comparison of the long-term average extraction limit against the average extraction within this Unit over that year and the preceding 2 years,

Note—

A water accounting year is defined in clause 42 (3).

- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in a river for environmental purposes, then for the

- purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work,
 - (d) for all access licences, an initial available water determination, of such volume of water as is equivalent to two times the access licence share component, should be made on 1 July 2003, and such determination should apply for one water accounting year,
 - (e) from 1 July 2004, available water determinations for local water utility and domestic and stock access licences should be of such volume of water as is equivalent to the access licence share component, with priority given to making this water available above the making of water available to all other categories of access licence, and such determinations should be made annually,
 - (f) from 1 July 2004, available water determinations for unregulated river access licences, including all subcategories, should be such volume of water as is equivalent to the access licence share component, except as provided in subclauses (g) and (h), and such determinations should be made annually,
 - (g) if the 3 year average of extraction in this Unit exceeds the long-term average extraction limit established in clause 35 by 5% or greater, then the available water determination for the following water accounting year for unregulated river access licences in this water source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
 - (h) if the 3 year average of extraction in this Unit is less than 95% of the long-term average extraction limit established in clause 35, the available water determination for unregulated river access licences in this water source shall be increased to such an extent as to allow extraction to increase to that long-term average extraction limit,
 - (i) notwithstanding subclause (h), and excepting the initial available water determination made in accordance with subclause (d), the available water determination should not exceed 100% of the total access licence share components,
 - (j) a new available water determination for unregulated river access licences determined under subclause (g) or (h) should be repeated for each of the subsequent two water accounting years unchanged in quantity, and

- (k) available water determinations for runoff harvesting access licences should be made annually and should be either the access licence share component or the water that can be extracted from time to time from the approved works, depending on the manner in which the share component is expressed on the licence.

Part 10 Rules for managing access licences

Division 1 General

38 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b) and 21 (a) and 21 (c) of the Act, having regard to:

- (a) the environmental water rules established in Part 4 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 5 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 7 of this Plan.

Division 2 Water allocation account management

39 Water allocation account management

This Division is made in accordance with sections 20 (2) (b) and 21 (c) of the Act.

40 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.

Note—

Water allocations may be assigned to, or from, these accounts by a water allocation assignment made under section 71T of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Note—

Water allocations may also be recredited to these accounts in accordance with section 76 of the Act, subject to the operation of a return flows scheme established under section 75 of the Act.

41 Accrual of water allocations

Water allocations will be accrued into water allocation accounts in accordance with the Minister's available water determinations as specified in clause 37.

42 Annual accounting for water extraction

- (1) Water taken from this water source will be accounted for at least annually.

- (2) Water extracted by a water supply work nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) The maximum water allocation that can be carried over from one water accounting year to the next is 100% of the access licence share component.
- (5) In any one water accounting year water taken from this water source under an access licence may not exceed the volume in the water allocation account, subject to clause 43 (1).
- (6) A water allocation account shall remain at or above zero at all times.

43 Three year accounting for water extraction

- (1) Water taken from this water source in any 3 consecutive water accounting years under an access licence may not exceed a volume consisting of:
 - (a) the water allocations accrued under the licence in those years,
 - (b) plus any water allocations assigned from another access licence by a water allocation assignment under section 71T of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another access licence, by water allocation assignment under section 71T of the Act in those years.
- (2) Notwithstanding subclause (1), water taken under an access licence from this water source in the first 3 water accounting years of this Plan may not exceed a volume consisting of:
 - (a) 3 times the share component of the access licence,
 - (b) plus any water allocations assigned from another access licence by a water allocation assignment under section 71T of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another access licence, by a water allocation assignment under section 71T of the Act in those years.

Division 3 Sharing flows on a daily basis

44 Sharing flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act.

45 Total daily extraction limits

(1) This Plan establishes a total daily extraction limit (hereafter **TDEL**) for each flow class as follows:

- (a), (b) (Repealed)
- (c) 11 ML/day for A class,
- (d) 26 ML/day for B class, and
- (e) 31 ML/day for C class.

Note—

These flows represent 10% of the very low flows during years 1 to 5, 60% of the top of A class flows, 30% of the top of B class flows and for C class flows 37% of the 50th percentile flows in the critical month of December.

(2) The TDEL for each flow class specified in subclause (1) applies to all rivers within this water source apart from those rivers identified as minor streams in a harvestable rights Order made under section 54 of the Act.

Note—

The harvestable rights Order applying to this area at the commencement of this Plan is that gazetted on 23 March 2001 under section 54 of the Act. It identifies minor streams as non-permanent 1st and 2nd order streams as shown on topographic maps.

46 Initial assignment of the TDEL to categories of access licence

The TDEL for each flow class will initially be assigned to categories of access licences according to the following:

- (a) Domestic and stock access licences:
 - (i) (Repealed)
 - (ii) 0.2 ML/day of A class,
 - (iii) 0.2 ML/day of B class, and
 - (iv) 0.2 ML/day of C class.
- (b) Local water utility access licences:
 - (i) (Repealed)

- (ii) 1.5 ML/day of A class,
- (iii) 2.2 ML/day of B class, and
- (iv) 2.2 ML/day of C class.

(c) Unregulated river access licences:

- (i) (Repealed)
- (ii) pursuant to clause 49, 0 ML/day of the very low flow class during years 6 to 10 of this Plan,
- (iii) 8.8 ML/day of A class,
- (iv) 23.1 ML/day of B class, and
- (v) 27.6 ML/day of C class.

Note—

Clause 49 specifies the provisions under which IDELs may be assigned in the very low flow class to access licences assessed as eligible.

47 Unassigned TDEL

At the commencement of this Plan, unassigned TDEL in each flow class is as follows:

- (a) (Repealed)
- (b) 0.5 ML/day of A class,
- (c) 0.5 ML/day of B class, and
- (d) 1.0 ML/day of C class.

Note—

Unassigned TDEL may vary as a result of the surrender or cancellation of an access licence's IDELs, or in the operation of Part 8 of this Plan.

48 Daily extraction limits for individual access licence holders

- (1) Each access licence requiring an IDEL, as specified in Part 12 of this Plan, is assigned the same proportion of the TDEL, specified in clause 46 as its share component bears to all the share components of licences of that category.
- (2) Notwithstanding subclause (1), the assignment of IDELs to eligible unregulated river access licences in the very low flow class will be determined in accordance with clause 49,
- (3) Subclause (1) should apply as follows,

- (a) A class IDELs should be assigned as soon as possible after the commencement of this Plan, and
 - (b) B and C class IDELs should be assigned once the total daily extraction of water by access licences during the period of B class flows equals or exceeds 25 ML/day on any day.
- (4) Notwithstanding subclauses (1) and (2), in relation to those access licences that are currently excluded from a flow class or part of a flow class by existing conditions on the access licence or the water supply work nominated by the access licence, the IDEL resulting from subclause (1) will be adjusted to reflect as far as possible such an exclusion.

49 (Repealed)

50 Granting of unassigned TDEL

- (1) Any unassigned TDEL may be assigned to access licences in the following circumstances:
- (a) where they are applied for as part of a new access licence application,
 - (b) to a local water utility access licence where the Minister varies the access licence in accordance with sections 66 (3) or 66 (4) of the Act, or
 - (c) to existing access licences for the purpose of pumping into farm dams if:
 - (i) the purpose of the additional IDEL sought is established by the proponent,
 - (ii) the IDEL sought is the minimum required to satisfy that purpose, and
 - (iii) the extraction is consistent with the objectives and principles of this Plan.
- (2) Where additional IDELs are assigned to an access licence in accordance with this clause, the amount of IDEL so assigned shall be determined by the Minister consistent with the ratios of share component to IDEL for the specific category of access licence as initially assigned under clause 48.

51 Adjustment to TDELS and IDELS

- (1) Where IDELs are assigned under clauses 49 and 50 any unassigned TDEL is reduced accordingly, and the TDEL assigned to the appropriate access licence category in clause 46 is increased accordingly.
- (2) Pursuant to section 45 (1) (b) of the Act, if total extraction of water under domestic and stock or native title rights exceeds the volume specified in Part 5 of this Plan:
- (a) first any unassigned TDEL then, if necessary, the TDEL for unregulated river access licences in clause 46 (c) shall be diminished to allow these additional basic

landholder rights to be met, and

(b) the IDELs of each unregulated river access licence will then be reduced to comply with this diminished TDEL.

(3) Pursuant to section 45 (1) (b) of the Act, if any unassigned TDEL cannot meet either:

(a) the IDEL requirements of applicants for new access licences for unregulated river (Aboriginal cultural) access or unregulated river (research) access, or

(b) a local water utility's IDEL requirements,

then the TDEL for unregulated river access licences in clause 46 (c) will be diminished to such an extent as to allow those requirements to be met.

(4) Following an adjustment to the TDEL for unregulated river access licences in subclause (3) the IDELs of each unregulated river access licence will then be reduced to comply with this diminished TDEL.

(5) Any adjustment to unregulated river access licence IDELs arising from this clause will be done at intervals of no greater than 5 years.

(6) If water that pursuant to an access licence:

(a) is committed to adaptive environmental water, then the TDEL for classes specified on the committed access licence in the specified category will be reduced by the IDEL on the access licence so committed and clauses 45 and 46 adjusted accordingly, or

(b) is uncommitted to adaptive environmental water, then the TDEL for classes specified on the committed access licence in the specified category will be increased by the IDEL on the access licence so uncommitted and clauses 45 and 46 adjusted accordingly.

52 Administrative arrangements for managing access to daily flows

(1) Notwithstanding the forgoing provisions of this Division, this Plan allows group management of access licences with respect to IDELs.

(2) The Minister may determine that, from the commencement of this Plan and until otherwise determined:

(a) all access licences with IDELs shall be made part of a group maintained by the Minister, and

(b) access licences with IDELs will be assessed as a whole against their combined IDELs.

(3) At any time when subclause (2) does not apply:

- (a) access licence holders may make a request to form a group for their access licences,
 - (b) access licence holders may have their access licence removed from a group, in which case they shall be permitted to extract under that licence a maximum of the licensed IDEL, and
 - (c) where an access licence is removed or added to a group, the group combined IDEL shall be adjusted by the amount of IDEL on the subject licence.
- (4) Groups will be managed according to the following rules:
- (a) daily extraction by a group cannot exceed the combined IDELs of all access licences in the group,
 - (b) where it been assessed that a holder of an access licence within a group is repeatedly causing the combined IDEL to be exceeded then the Minister may remove that access licence from the group,
 - (c) where daily extraction by a group exceeds the combined IDELs of all access licences in the group, then the Minister may dissolve the group and require each access licence holder to comply with the licensed IDELs,
 - (d) should a holder of an access licence which is part of a group commit the IDELs of that licence to the environment consistent with section 8 (1) (c) of the Act, then those IDELs shall be removed from the group,
 - (e) an access licence may not be in more than one group, and
 - (f) the Minister may refuse to allow an access licence to be included in a group, and may refuse a request to form a group.

53 Infrastructure failure

In the event of infrastructure failure, the Minister can elect to:

- (a) continue to announce the current flow class,
- (b) announce another flow class based on climatic conditions and any other flow gauging information, or
- (c) restrict access to water to the lowest flow class.

Note—

Infrastructure is defined in the dictionary.

Note—

If satisfied that it is necessary to do so in the public interest, the Minister may direct the holders of an access

licence to cease using a water supply work in accordance with section 323 of the Act.

Part 11 Access licence dealing rules

54 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71Z of the Act.
- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71Z of the Act and the rules in this Part.

Note—

There are a number of mechanisms within the Act, called access licence dealings, to change either the ownership of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised. These dealings are governed by the principles in section 5 of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note—

Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71Z of the Act provides for the access licence dealing rules in this Plan to prevail.

55 Rules relating to constraints within this water source

- (1) This clause applies to any relevant dealings under sections 71Q, 71S and 71W of the Act, and with respect to water allocation assignments within this water source under section 71T of the Act.
- (2) Dealings are prohibited under this clause if:
 - (a) any of the access licences or water allocations involved are not within this water source,

Note—

Clause 57 relates to any dealings that involve an access licence moving from one water source to another.

- (b) the dealing relates to new licence categories specified in clause 32 (3),
- (c) prior to the assignment of IDELs in all flow classes the dealing results in the total share components of all access licences that have nominated water supply works in the receiving management zone exceeding 10% of the total share components existing at the time of the commencement of Part 2 of Chapter 3 of the Act in this water source, unless the dealing is:
 - (i) from management zone 1 to management zones 2, 3 or 5,

- (ii) from management zone 2 to management zones 3 or 5,
 - (iii) from management zone 3 to management zone 5,
 - (iv) from management zone 4 to management zones, 3 or 5,
- (d) after the assignment of IDELs in all flow classes the dealing results in the total IDELs of all access licences that have nominated water supply works in the receiving management zone exceeding 10% of the total IDELs existing at the time of the assignment unless the dealing is:
- (i) from management zone 1 to management zones 2, 3 or 5,
 - (ii) from management zone 2 to management zone 3 or 5,
 - (iii) from management zone 3 to management zone 5, or
 - (iv) from management zone 4 to management zone 3 or 5.

Note—

The management zones are shown in Schedule 2. These provisions facilitate the trading of IDELs in a downstream direction, and limit the potential change to daily river flow that could occur from dealings in an upstream direction.

- (3) Dealings that assign water allocations between access licences inside this water source are permitted.
- (4) Dealings under this clause may be subject to a conversion factor established by the Minister, and published in an Order made under section 71Z of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

56 Rules for access licence dealings which alter the times, rates or circumstances specified in access licence extraction components

Notwithstanding clause 55, applications under section 71S of the Act to vary the times, rates or circumstances specified in an access licence with respect to the taking of water under the access licence are prohibited.

57 Rules for change of water source

- (1) This clause relates to dealings under section 71R of the Act.

Note—

Section 71R dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71W of the Act) in the receiving water source before extraction can commence.

- (2) Dealings under section 71R of the Act are prohibited in this water source, unless

provided for in this clause.

- (3) An access licence with a share component specifying this water source may be cancelled and a new access licence issued in another water source, only if the access licence dealing rules in the other water source permit such a dealing.
- (4) An access licence with a share component specifying another water source may not be cancelled and a new access licence specifying this water source issued.
- (5) The extraction component of any access licence cancelled under this clause is not to be carried over to the new access licence.

58 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71O of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category may be permitted only if:
 - (a) the conversion is from an unregulated river access licence to a runoff harvesting access licence,
 - (b) the conversion is from a runoff harvesting access licence to an unregulated river access licence,
 - (c) (Repealed)
 - (d) the conversion is from an unregulated river access licence to a domestic and stock access licence.
- (3) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71Z of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

59 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71U of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of this water source are prohibited.

60 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71T of the Act, in relation to water allocation assignments between water sources.
- (2) Dealings that assign water allocations from access licences outside this water source

to access licences in this water source are prohibited.

61 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71V of the Act.
- (2) Dealings that result in interstate assignment of water allocations to or from this water source are prohibited.

Part 12 Mandatory conditions

62 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
- (2) All access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence, including IDELs arising from the operation of Part 10 Division 3 of this Plan where applicable, and the variation thereof,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to the water allocation account management rules established in Part 10 Division 2 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account,
 - (f) the requirement that water may only be taken under the access licence by the water supply work nominated by the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.

62A Very low flow access conditions

- (1) Notwithstanding any cease to pump conditions established on the licence, during periods of very low flows, holders of access licences listed on Schedule 6 may continue to access water to comply with the requirements of the Food Production (Safety) Act or the Prevention of Cruelty to Animals Act for the following purposes:
 - (a) fruit and vegetable washing,
 - (b) cleaning of dairy plant and equipment for the purpose of hygiene,

- (c) poultry watering and misting,
 - (d) cleaning of enclosures used for intensive animal production for the purposes of hygiene, and
 - (e) essential human health and hygiene.
- (2) The maximum daily volume that can be extracted under subclause (1) will be the minimum required to satisfy the purposes in that subclause, will be individually assessed and specified on each access licence within 12 months of the commencement of this Plan, will not exceed 20 kilolitres per day, and will not be increased.
- (3) Upon written request by the holder of an access licence, the Minister may add a licence to Schedule 6, but only if the licence meets the purpose requirements established in subclause (1), and the purpose existed prior to 1 July 2004.
- (4) An access licence will be removed from the Schedule if:
- (a) any access licence dealing results in the water being extracted from a different location,
 - (b) an alternative water supply is obtained, that satisfies the requirements of subclause (1), or
 - (c) the licence is surrendered, cancelled, or not renewed.
- (5) Notwithstanding subclauses (1) to (4), extraction of water by an approved water supply work is only permitted if there is visible flow in the river in the vicinity of the work.
- (6) An assessment of the continuing requirements for access under this clause will be undertaken before the end of the Plan, and the Schedule amended or deleted at the end of the Plan, if such a review determines that this concessional access is no longer required.
- (7) The assessment made under subclause (6) will be undertaken for the Plan as a whole, and for each individual licence on the Schedule.

63 Unregulated river access licences

All unregulated river access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group, and
- (b) notwithstanding subclause (a), water may be taken without any restrictions in rate

from an in-river dam while the dam is passing all inflows.

64 Local water utility access licences

All local water utility access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of supplying water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, and
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.

65 Domestic and stock access licences

All domestic and stock access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

66 Runoff harvesting access licences

All runoff harvesting access licences shall have a mandatory condition imposed on them specifying that water may be taken without restriction in rate, but only from the specified work.

67 Unregulated river (Aboriginal cultural) access licences

All unregulated river (Aboriginal cultural) access licences shall have mandatory conditions to give effect to the following:

- (a) water shall only be taken by Aboriginal persons or communities for personal, domestic

and communal purposes including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, and gathering, and for recreational, cultural and ceremonial purposes,

- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

68 Unregulated river (research) access licences

All unregulated river (research) access licences shall have mandatory conditions to give effect to the following:

- (a) water shall only be taken for the purpose of scientific research, experimentation or teaching by accredited tertiary institutions, government bodies or other approved organisations, where any primary production resulting from the research program is not sold for profit,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

69 Mandatory conditions on water supply works approvals

All approvals for water supply works in this water source shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:

- (a) flow measurement devices:
 - (i) shall be installed and maintained on all works used for extraction of water under an access licence, and
 - (ii) shall be of a type and shall be maintained in a manner which is acceptable to the

Minister,

- (b) water extraction and property water management infrastructure details shall be provided to the Minister on request,
- (c) it is the responsibility of the work approval holder to ascertain from the Minister the flow class at any time before commencing to take water under a an access licence with an IDEL,
- (d) notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is not permitted if there is no visible flow in the river in the vicinity of the work, and
- (e) extraction under an access licence through an approved work is only authorised with respect to the work nominated by the access licence.

Part 13 Granting and amending water supply works approvals

70 Granting and amending water supply works approvals

This Part is made in accordance with section 21 (b) of the Act.

71 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence share component specifying the runoff harvesting dam as the nominated work.
- (2) When the share component that may be taken from a runoff harvesting dam are reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 11 of this Plan, the Minister may impose an additional condition requiring the works to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the works to be reduced, consistent with the reduction in share component available.

Note—

Extraction of water from a runoff harvesting dam requires a runoff harvesting access licence, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required. Runoff harvesting is a category of access licence to be established by regulation under section 57 (k) of the Act.

72 In-river dams

No new in-river dams shall be approved within this water source.

Note—

Taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act.

Part 14 Monitoring and reporting

73 Monitoring and reporting of performance indicators

The monitoring and reporting of the performance indicators specified in clause 13 shall be undertaken by the Minister.

Note—

Review and Audit of this Plan

In accordance with section 43A of the Act, the Natural Resources Commission must undertake a review of this Plan prior to any decision to extend its term or to make a new plan. The review must consider the extent to which the Plan's water sharing provisions have contributed to achieving or not achieving the relevant natural resource management standards and targets in the catchment management area (as referred to in section 5 of the *Catchment Management Authorities Act 2003*).

When undertaking this review the Natural Resources Commission is required to call for public submissions. The Commission will take into consideration any submission received as well as any other relevant State-wide or regional government policies or agreements that apply to the catchment management area.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with the water management committee, where one exists.

Note—

Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the Implementation Program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program are included in the annual report for the Department.

Part 15 Amendment of this Plan

74 Amendment of this Plan

This Part is made in accordance with section 45 (1) (b) of the Act.

75 Amendment of very low flow provisions

- (1) The Minister may, under section 45 (1) (b) of the Act and by notice published in the NSW Government Gazette, vary the very low flow levels established in clause 17 and consequently the bottom of A class established in clause 17, following field verification.
- (2) Any variation made under subclause (1) should not result in the 3.5 ML/day level (cease to pump) being less than 4 ML/day or being greater than 9 ML/day inclusive, with the 5 ML/day commence to pump flow level adjusted by an equal volume.

- (3) The Minister should cause the field verification in subclause (1) to be undertaken as soon as practical, but before the review of this Plan under section 43 (2) of the Act.
- (4) The field verification should assess the degree to which the following objectives of the are met:
 - (a) Objective 1—to protect water levels in natural river pools and wetlands during periods of no flow, and
 - (b) Objective 2—to protect natural low flows.
- (5) In undertaking the field verification the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the field results and conclusions in terms of the degree to which the objectives in subclause (4) are met,
 - (iv) the flow level recommended to meet the objectives in subclause (4), and
 - (v) the socio-economic impacts of recommended changes to the flow level.

76 Review of field verification

- (1) The Minister should seek advice from a review body on the field verification report specified in clause 75 (5) (b) before varying this Plan in accordance with clause 75 (1), if the field verification recommends a variation in the very low flow levels established in clause 17.
- (2) This review body may be:
 - (a) a water management committee with water sharing responsibilities for this water source, or
 - (b) the relevant Catchment Management Authority, or
 - (c) an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a water management committee or Catchment Management Authority referenced at subclause (2) (a) or (b).
- (3) The review body should provide advice to the Minister on the field verification report, and advise on any changes to the recommendations contained in the report in relation to any variation of the very low flow levels.

- (4) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date at the latest.

77 Other amendments of this Plan

This Plan can be amended in accordance with the following clauses of this Plan:

- (a) clause 23 in respect to planned environmental water,
- (b) clause 49 in respect to very low flow TDEs, and
- (c) clause 51 in respect to adjustments to TDEs and IDEs.

78 Amendment relating to planned environmental water

- (1) The Minister may amend this Plan to provide for the recovery of planned environmental water as follows:
- (a) the recovery is only to apply where the Minister has cancelled an access licence held by the Minister in accordance with section 8A of the Act,
 - (b) the amount of additional water to be provided as planned environmental water is to be equivalent to the annual average extraction of water under the cancelled licence over the long-term,
 - (c) the average annual long-term availability of water for the remaining access licences that relate to the water source concerned is to be reduced by the average annual long-term extraction of water under the cancelled licence.
- (2) The Minister may amend this Plan to specify the purposes for which planned environmental water committed under section 8A of the Act is to be used.

79 Amendment of Plan relating to floodplain harvesting

The Minister may amend this Plan so as to provide for the floodplain harvesting of water by amending the waters or water sources to which this Plan applies and by consequential amendments so long as the amendments:

- (a) if the Plan has already taken into consideration floodplain harvesting extractions, do not affect the outcomes of the long-term extraction limit specified in the Plan, or
- (b) if the Plan has not already taken into consideration floodplain harvesting extractions, do not allow more water being taken pursuant to access licences for floodplain harvesting than permitted under Schedule F to the Agreement within the meaning of the *Murray-Darling Basin Act 1992*.

Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

account water is the balance in an access licence water allocation account at a particular time.

Note—

A access licence water allocation account records water allocations accrued under the licence as well as water allocations taken, assigned, or re-credited. The operation of the account is also governed by rules for the carrying over of credits from one accounting period to the next and rules for the maximum credit that may be allowed to accumulate in the account as established in a water sharing plan. Water allocations are the shares of available water accrued under an access licence from time to time as a result of available water determinations.

conversion factor refers to the adjustment factor that is to be applied to share components when they are cancelled or reissued in a different water source and visa versa, or when the licence category is changed. It is designed to provide for the fact that the value of a unit of share component in terms of the average water allocations that result from it may vary from one water source to another, or from one category of licence to another.

endangered ecological communities means ecological communities listed in Schedule 1 of the [Threatened Species Conservation Act 1995](#) or Schedule 4 of the [Fisheries Management Act 1994](#).

extraction limit is a limit on the amount of water that may be extracted from this water source.

extraction management unit is a group of water sources for the purpose of managing annual average extraction.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs. See also **in-river dam** and **runoff harvesting dam**.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) very low flows may be a class on their own,
- (b) low flows may be categorised as 'A' class,
- (c) moderate flows may be categorised as 'B' class,
- (d) high flows may be categorised as 'C' class,

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

individual daily extraction limit (IDEL) is the volume of water that may be extracted by an individual access licence from an unregulated river on a daily basis from a particular flow class.

infrastructure includes, but is not limited to, a:

- (a) flow gauging device or any other appliance that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated, or
- (b) flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within this water source.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher order rivers are as defined in the order made under section 5 of the [Water Act 1912](#) in relation to the definition of a "river"

gazetted 23 March 2001. See also **farm dam** and **runoff harvesting dam**.

management zone is an area within the water source in which daily extraction limits may be defined or where dealing restrictions are approved. Management zones may be designated where the water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area. They may also be designated where local dealing restrictions are in place.

runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the order made under section 5 of the [Water Act 1912](#) in relation to the definition of a river gazetted 23 March 2001. See also **farm dam** and **in-river dam**.

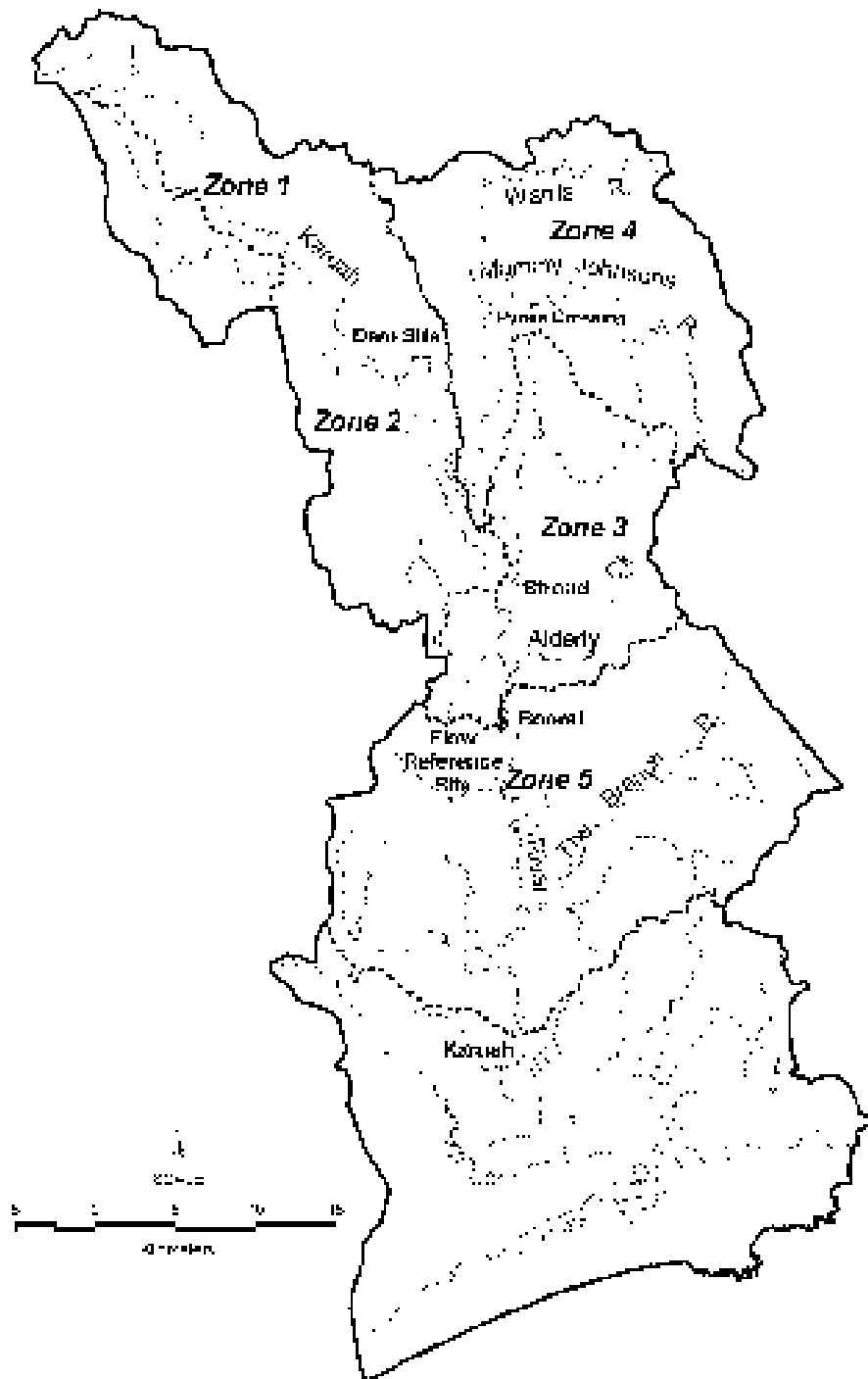
Note—

This order refers to watercourses shown as blue lines on topographic maps. The lines which are uppermost in a catchment are 1st order streams, when two 1st order streams are joined they make a 2nd order stream, etc. For more information see the Farm Dams Assessment Guide available from the Department of Land and Water Conservation.

total daily extraction limit (TDEL) is the volume of water that may be extracted under access licences from an unregulated river on a daily basis from a particular flow class.

water accounting year is any 12 month period commencing on 1 July.

Schedule 2 Karuah River Water Source



Schedule 3 Rivers in the Karuah River Water Source

This water source includes:

Karuah River

Wards River

Alderley Creek

Sandy Gully

Barnes Creek	Mill Creek
Black Soil Creek	Saggers Creek
Booral Creek	Lamans Creek
Bulga Creek	Mosions Creek
Bundabah Creek	Ramstation Creek
Station Creek	Reedy Creek
Camerons Creek	Telegherry River
Cromarty Creek	Scotters Creek
Crystal Creek	Limestone Creek
Cherry Tree Creek	Snapes Creek
Deep Creek	Sugar Loaf Creek
Duckhole Creek	Andersons Creek
Hobarts Creek	The Branch River
Kore Kore Creek	Lewis Creek
Lawlers Creek	Tilligerry Creek
Lillipilli Creek	Twelve Mile Creek
Limeburners Creek	Washpool Creek
Mammy Johnsons River	Yalimbah Creek
Chainy Flat Creek	

Schedule 4 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL—contributes to target in full

HIGH—while not fully contributing to target is considered a good level of contribution

PARTIAL—goes some way to the target

LOW—only small degree of contribution

Relevant target	Level of contribution	Comments
------------------------	------------------------------	-----------------

<p>Target 1c Average annual extraction limits which are ecologically sustainable, and which minimise downstream impacts, established in all coastal catchments.</p>	<p>HIGH</p>	<ul style="list-style-type: none"> • This Plan clearly sets out the basis for the extraction limit for Karuah River Water Source • The limit together with the proposed TDELs and IDELs should ensure adequate downstream flows • Rules set out in Part 9 of this Plan
<p>Target 1f Rules for adjustments to future water allocations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant water management committee, and acted upon.</p>	<p>FULL</p>	<ul style="list-style-type: none"> • Rules set out in Part 9 of this Plan
<p>Target 2 All water management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes.</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • This Plan has put in place total daily extraction limits which protect more than 70% of moderate to high flows (Part 10, Division 2) • This Plan has improved very low flow protection from current while still allowing them to remain significantly impacted • A class flows between 3.5 and 18 ML/day are impacted, more so than estimated current • This water source has been assessed as high conservation value and therefore the relatively low level of protection/restoration of low to very low flows could be a post research issue • This Plan is consistent with relevant Threatened Species Recovery Plans
<p>Target 4a Wherever the frequency of “end of system” daily flows would be less than 60 percent of the predevelopment level without environmental flow rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent of the predevelopment frequency.</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • Total daily extraction limits from A class protects 40% of flows which is nil improvement on estimated current • B class protects 70% of flows • C class protects 85% of flows • This Plan also maintains low extraction level for the first 24 hours of flow following a river rise • Rules set out in Parts 3, 4 and 10 of this Plan

Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile.

PARTIAL

- Cease-to-pump levels of 3.5 ML/day and 5 ML/day on a rising river is significantly less than the 95th percentile of all days with flow (9 ML/day)
- This Plan allows for extraction of up to 0.5 ML/day below the cease to pump for poultry and dairy sheds
- Historical and field information suggests that it is a losing river and therefore when flows are about 3.5 ML/day at the end of the system the flows in the mid system are up to 100% higher
- This Plan provides for the cease to pump to be increased to maintain 10 ML/day at Stroud Weir in June/July and October/November once Stroud Weir fishway is operational
- On a rising river this Plan provides for pumping to be delayed for 24 hours.
- This Plan provides for field assessments and a review of the CtP with adjustment up to 9 ML/day and 11 ML/day on a rising river if necessary
- Rules set out in Parts 3, 4 and 10 of this Plan

Target 5 Access rights for water access licensees clearly and legally specified in terms of share or extraction components.

FULL

- This Plan clarifies the share component of the unregulated access licence and establishes total daily extraction limits for distribution to individual licensees
- This Plan provides principle for trading of share components and individual daily extraction limits
- Rules set out in Part 10 of this Plan

Target 6 The total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 200 percent of the long-term average annual extraction limit in surface water systems.

FULL

- Total licensed share components for the Karuah River Water Source should not exceed 200% of extraction limit for this water source
- Rules set out in Part 9 of this Plan

Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy. PARTIAL

- The Government has yet to establish these mechanisms and therefore these early plans cannot effectively address these targets
- This Plan proposes an exemption from the access licence embargo for Aboriginal cultural purposes

Target 8 Daily extraction limits specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80 percent of stressed river subcatchments. FULL

- This Plan establishes daily extraction limits across the water source
- Rules set out in Part 10 of this Plan

Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect basic domestic and stock water rights from the impact of other water extraction and use. PARTIAL

- Cease to pump level (3.5-5 ML/day) may not fully protect flows for domestic and stock requirements
- Rules set out in Parts 3 and 5 of this Plan
- One Aboriginal community representatives has been involved in development of this Plan
- Aboriginal community forums have been held to discuss this Plan
- An Aboriginal respect statement has been developed by Aboriginal people consulted during the development of this Plan

Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed. PARTIAL

- This Plan does not address specific Aboriginal cultural or traditional requirements and has not identified any sites of particular importance
- This Plan does provide reasonably high level of environmental protection which should assist in protecting Aboriginal values

Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them. PARTIAL

- This Plan provides for trading of share components or individual daily extraction limits

Target 16a All licensed share components of access licences tradeable HIGH

- This Plan does not restrict individual daily extraction limits water transfers in a downstream direction, but restricts upstream transfers so that the total limits in a management zone are below 110% of the total limits at the time of making the Plan
- Rules set out in Part 11 of this Plan

Target 16c Conversion factors and protocols established to facilitate trading between water sources and/or extraction management areas, whilst also protecting existing entitlements and environmental water.

PARTIAL

- This Plan establishes an exchange rate of 1:1 for trading within this water source but does not facilitate trade between extraction management areas

Target 16d Reduced conversion factors only applied when necessary to offset increased transmission losses associated with water supply delivery.

FULL

- This Plan does not impose reduced conversion factors
- This Plan establishes rules where unassigned volumes are identified and mechanisms to distribute them nominated

Target 16e Any unassigned access rights identified and clear mechanisms established for their future assignment.

FULL

- The presence of unassigned volumes in A and B class are of concern given that the TDELS are significantly below the full development peak daily demand
- The rules for unassigned water volumes future assignment are set out in this Plan
- Rules set out in Part 10, Division 3 of this Plan

Target 16f Water transfer zones established and limits/constraints to transfers between them made explicit in all water sources subject to a gazetted water sharing plan.

PARTIAL

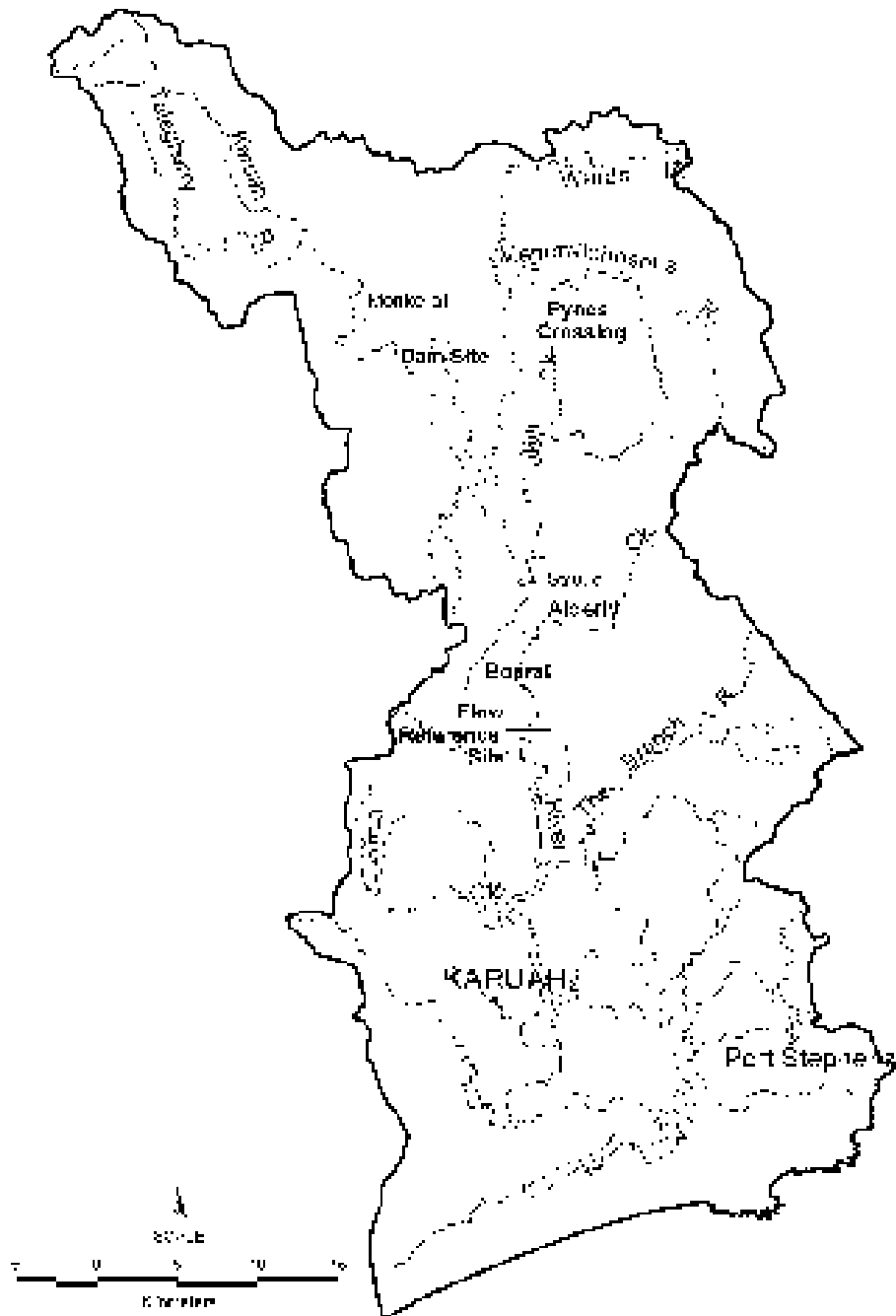
- This Plan establishes water transfer zones (schedule 4)

Target 35 All water management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current ANZECC Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries.

NIL

- This Plan includes a generalised water quality objective
- This Plan does provide reasonably high level of environmental protection which should assist in protecting water quality
- A first-flush rule is established to protect flows for 24-hours following a river rise
- Rules set in Parts 4 and 10 of this Plan

Schedule 5 Karuah River Extraction Management Unit



Schedule 6 Access licences with access to very low flows

The access licences with the following numbers have access to very low flows in accordance with Clause 62A:

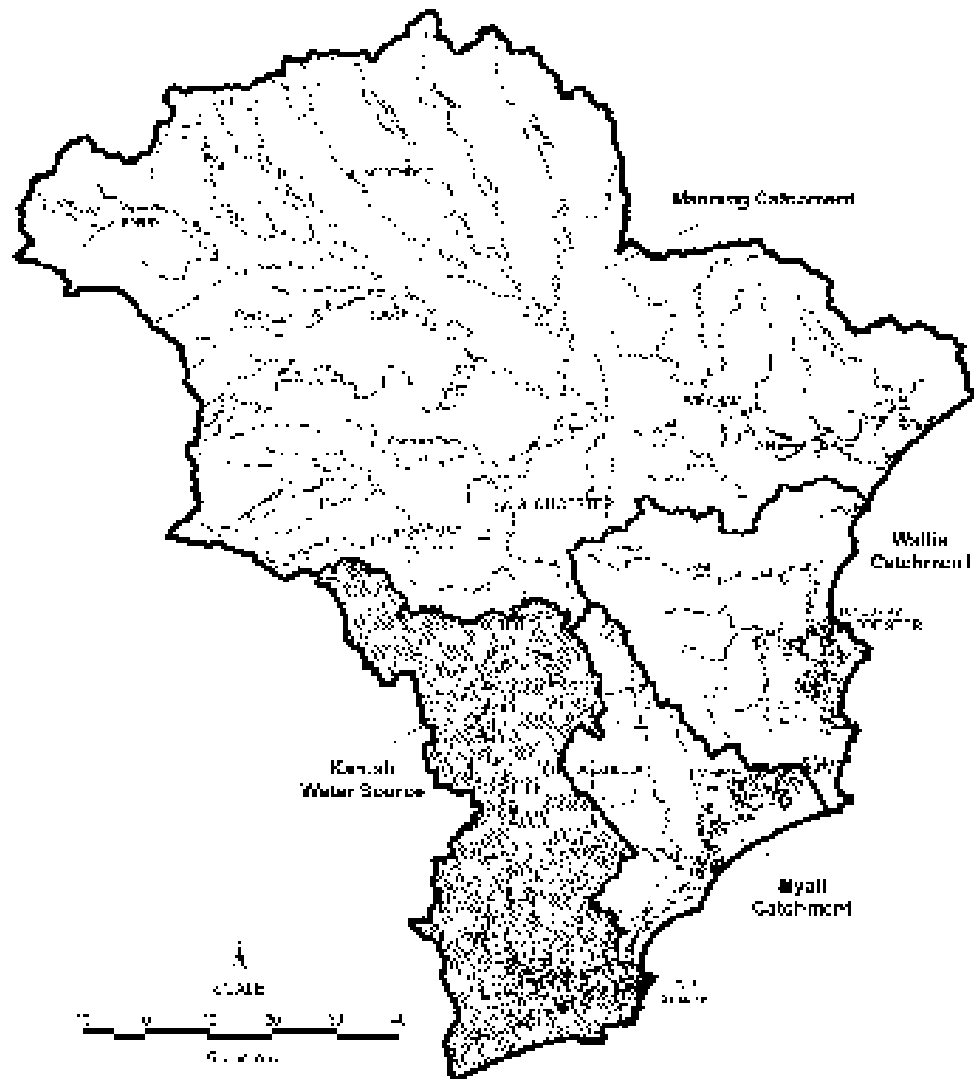
Licence Number	Purpose
20SL024517	dairy
20SL029842	dairy

20SL030639	dairy
20SL034204	dairy
20SL040017	dairy
20SL041506	poultry
20SL043003	caravan park
20SL043285	dairy
20SL048719	poultry
20SL060639	poultry
20SL060861	poultry
20SL060862	poultry
20SL060863	poultry
20SL060867	poultry
20SL060887	piggery
20SL061020	piggery/yabbies
20SL024158	dairy/piggery
20SL061019	poultry
20SL060881	poultry
20SL061021	poultry
20SL061018	poultry
20SL061269	poultry

Note—

The access licences in this Schedule may change during the period of this Plan. The Regional Office of the Department of Infrastructure, Planning and Natural Resources, shown in Appendix 2, should be contacted for a current list.

Appendix 1 Lower North Coast Water Management Area



Appendix 2 Location of maps

The maps in relation to this Plan may be inspected at:

Regional Office
Department of Land and Water Conservation
464 King Street
NEWCASTLE NSW 2300

Taree Office
Department of Land and Water Conservation
98 Victoria Street
TAREE NSW 2430

Appendix 3 Performance indicators

Performance indicators for the Karuah River Water Sharing Plan

Performance indicator	Related objective	As measured by	Commentary
(a) change in low flows.	11 (a) 11 (b) 11 (e) 11 (f) 11 (g) 11 (o)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics, from time of Plan commencement, at identified reference points. 	<ul style="list-style-type: none"> River Flow Objectives (RFO) 1, 2 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. <p>Note—</p> <p>Not every objective is relevant to every river in NSW.</p> <ul style="list-style-type: none"> Plan will contribute to a decrease in the frequency and duration of low flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers. Where data is limited, it is only possible to assess change from the period of plan commencement to the time the indicator is assessed. There will be a high climatic influence on changes to the flow characteristics, depending on if the time period of assessment has been wet or dry.

(b) Change in moderate to high flows.	11 (c) 11 (d) 11 (e) 11 (g) 11 (k) 11 (n)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics, from time of Plan commencement, at identified reference points. 	<ul style="list-style-type: none"> RFO 3. Plan will maintain or increase the frequency and duration of moderate to high flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers. Where data is limited, it is only possible to assess change from the period of plan commencement to the time the indicator is assessed. There will be a high climatic influence on changes to the flow characteristics, depending on if the time period of assessment has been wet or dry. Water sharing plans for unregulated water sources have the potential to impact on urban water supplies.
	(c) Change in local water utilities' access (where those utilities are involved in urban water provision).	11 (l)	<ul style="list-style-type: none"> Change in safe yield (safe yield is the annual demand that can be supplied from the water supply headworks and is based on the period of records used and an acceptable level of restriction).

- | | | | |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(d) Change in ecological condition of this water source and dependent ecosystems.</p> | <p>11 (a)
11 (c)
11 (e)
11 (f)
11 (g)
11 (l)
11 (o)</p> | <ul style="list-style-type: none"> • Periodic assessment of identified attributes of this water source and dependent ecosystems. | <ul style="list-style-type: none"> • The ecological influence of the Plan is limited to providing for changes in flow regime aimed at improving the ecological condition of the water source and dependent ecosystems. • The focus of this performance indicator will be the effect of flow strategies. • Information on flow requirements of ecological systems is limited so physical or hydraulic surrogates will be used to assess the influence of the Plan. For example, the status of wetted area, depth in pools and flow velocity over riffles. • In addition to the environmental water provisions defined in this Plan, there are many other factors that contribute to achievement of ecological objectives. Riparian vegetation, water quality, farming techniques, soil erosion, water flow patterns and other catchment characteristics all significantly influence ecological condition. It is difficult to assess which factor is the most influential at a particular time and place. • Research and development into the impacts of flow on ecological condition will be incorporated into assessment of the plan where the information is available and relevant. |
| <p>(e) Extent to which basic landholder rights requirements have been met.</p> | <p>11 (h)
11 (k)
11 (i)</p> | <ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. | <ul style="list-style-type: none"> • Basic landholder rights usage figures in water sharing plans are estimated (not actual use). |

<p>(f) Change in economic benefits derived from water extraction and use.</p>	<p>11 (h) 11 (i) 11 (j) 11 (k) 11 (m) 11 (n)</p>	<ul style="list-style-type: none"> • Number of days access provided over the time of the plan. • Number of new off stream storages. • Change in unit price of water transferred. • Change in gross margins. 	<ul style="list-style-type: none"> • There are many factors affecting economic status of a region, for example commodity prices. • Measurement of the number of new off stream storages will indicate the adjustment to the rules and the ongoing access to water. • Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan provisions. • The data can reflect changes in crops, commodity prices, climate, water availability, economic climate and input costs.
<p>(g) Extent to which native title rights requirements have been met.</p>	<p>11 (l)</p>	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
<p>(h) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.</p>	<p>11 (l)</p>	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of 5 years there should be relevant information collected for each water source, as a minimum requirement.

Appendix 4 (Repealed)